

frame data displayed on the display. The player tracking interface display may include a plurality of lamp controllers, such as a lamp controller used to control an active matrix or passive matrix of OLEDs and a lamp controller used to control one or more electro-luminescent lamps formed in a shape of a symbol (see FIG. 6).

[0135] The player tracking controller 501 may receive input signals detected from a touch screen controller 504 connected to a plurality of touch sensors or proximity sensors 505. The input signals may be generated when an input button on the player tracking interface display 200 is activated. The input signals may be used to provide game services that are available through the player tracking system 500.

[0136] As described with respect to FIGS. 4A, 4B and 5, the gaming machine may include a game input interface display 700 and a game service interface display 250 that are controlled by the master gaming controller 504. The master gaming controller may control the lamp elements 507 on the game input interface display 700 via the lamp controller 502 and may receive input from sensors in the display 700 via the touch screen controller 104. Similarly, the master gaming controller may control the lamp elements 509 on the game service interface display 250 via the lamp controller 502 and may receive input from sensors in the display 250 via the touch screen controller 504.

[0137] The player tracking unit 107 may include one or more non-proprietary peripheral communication connections, such as a USB-compatible communications connection or a Firewire compatible communications connection. The player tracking controller 501 may be designed or configured to communicate with the master gaming controller 104 and the player tracking devices, such as a card reader and the player tracking interface display 700, using the non-proprietary peripheral communication connection, such as an USB connector, and using a non-proprietary communication protocol, such as USB. Details of using the non-proprietary peripheral communication connection are described in co-pending U.S. Pat. No. 6,251,014, filed Oct. 6, 1999, by LeMay, et al., entitled, "STANDARD PERIPHERAL COMMUNICATION," which is incorporated herein in its entirety and for all purposes.

[0138] In one embodiment, the master gaming controller 104 and the player tracking controller 501 may communicate with the different interface displays using both wired and wireless communications. For instance, the master gaming controller 104 may communicate with the touch screen controller 504 in the game input interface 700 via a wire USB-compatible connector and using a USB communication protocol. However, the master gaming controller 104 may communicate with the touch screen controller 504 in the game service interface display 250 using a wireless communication protocol such as Bluetooth, IrDA, IEEE 802.11 a, IEEE 802.11b, IEEE 802.11x (e.g. other IEEE 802.11 standards such as IEEE 802.11c, IEEE 802.11d, IEEE 802.11e, etc.), hipervlan/2, and HomeRF. The use of a wireless communication protocols in the thin light-emitting interface displays of the present invention may simplify the installation process on the gaming machine by allowing the interface display to be installed without having to run wires to the master gaming controller.

[0139] FIG. 10 is a block diagram of a number of gaming machines with player tracking units connected to a player

tracking server. The DCU 106, which may be connected to up to 32 player tracking units as part of a local network in a particular example, consolidates the information gathered from player tracking units in gaming machines 100, 101, 102 and 103 and forwards the information to the player tracking account server 120. The player tracking account server is designed 1) to store player tracking account information, such as information regarding a player's previous game play, and 2) to calculate player tracking points based on a player's game play that may be used as basis for providing rewards to the player.

[0140] The player tracking unit 107 communicates with the player tracking server via the SMIB 103, a main communication board 110 and the data collection unit 106. The SMIB 103 allows the player tracking unit 107 to gather information from the gaming machine 100 such as an amount a player has wagered during a game play session. This information may be used by the player tracking server 120 to calculate player tracking points for the player. The player tracking unit 107 is usually connected to the master gaming controller 104 via a serial connection of some type and communicates with the master gaming controller 104 using a communication protocol of some type. For example, the master gaming controller 104 may employ a subset of the Slot Accounting System (SAS protocol) developed by IGT of Reno, Nev. to communicate with the player tracking unit 107.

[0141] The master gaming controller 104 is in communication and may control the display 34, the game input interface display 700, and the game service interface display 250. The master gaming controller 104 and the player tracking controller 501 may communicate via the communication board 110. The player tracking controller 501 is in communication and may control the card reader 24 and the game service interface display 250. In one embodiment, the master gaming controller 104 and player tracking controller 501 may share the game service interface display 250. Further, as was described with respect to FIG. 5, the game service interface display 250 is not mounted on the front face of the player tracking unit. It is mounted on a gaming machine exterior surface and connected via a wired or wireless connection to the player tracking controller 501.

[0142] Although the foregoing invention has been described in some detail for purposes of clarity of understanding, it will be apparent that certain changes and modifications may be practiced within the scope of the appended claims. For instance, while the gaming machines of this invention have been depicted as upright models having top box mounted on top of the main gaming machine cabinet, the use of gaming devices in accordance with this invention is not so limited. For example, gaming machine may be provided without a top box or the gaming machine may be of a slant-top or a table top design.

What is claimed is:

1. An interface display for inputting and outputting gaming information on a gaming machine, the interface display comprising:

a substrate;

a plurality of electro-luminescent elements formed in a light emitting layer on the substrate for outputting gaming information;